

Highway Construction Program

The Rising Cost of Construction Materials

Wrestling with the Issues

WSDOT, along with other states, has observed the rapid rise in steel prices, primarily due to an unprecedented demand for steel overseas. States have been wrestling with the issue of whether or not to include an “escalation clause” into construction contracts to help insulate or share the risk with the contractors. Similar concerns focus on cement shortages and price escalation, as well as increased prices for crude oil, which drives up the market price for fuel and asphalt.

The direct effect of steel, fuel and cement escalation on the cost of work is difficult to measure. WSDOT uses unit price contracting, where the contractor is requested to provide “bid prices” for completed items of work, as opposed to prices for individual components that make up a complete item of work. For instance, the contractor provides a complete price to furnish, install and test a storm sewer pipe. Integrated in this price, are all material cost, labor cost, equipment cost and any additional cost that may be associated with the risk of doing the work. It is generally not possible from the bid to isolate the cost of the pipe itself. However, all other things remaining constant, an increase in the cost of pipe would ultimately raise the price the contractor bids.

WSDOT collected data on select items that would serve as a possible measure for the effect that price escalation has had on contracts. This was done under the assumption that “all other things remained constant”. In the end analysis, the items for “Steel Reinforcing Bar” and “Hot Mix Asphalt” revealed upward price trends that illustrate WSDOT’s concern with price escalations. A consistent trend for cement was not present. The trend of increased prices for steel reinforcing bars (rebar) and hot mix asphalt on WSDOT projects is similar to what is being reported on a national scale. Engineering News-Record (ENR) magazine tracks material price indexes for rebar and PG 58, the asphalt binder in Hot Mix Asphalt, in twenty cities around the country. The ENR price index is based on the material cost and does not include the other costs that are reflected in the WSDOT bid prices. To compare WSDOT and ENR trends, the ENR price indexes have been adjusted to a baseline that is equivalent to the WSDOT bid price for the first quarter of 2002.



Steel rebar used to build the Methow River Bridge deck.



Asphalt paving on I-90 at Moses Lake.